

# DUTCH CYCLING EMBASSY

### ThinkBike Austin (Texas)

**Team City Center** 

25 - 26 October 2012

#### Content

- > Who are we?
- > Qualities and problems
- > Analysis: short car trips (Mobility scan)
- Impressions from our tour
- > Networks for an accessible city
- Ideal cross sections for complete streets
- > Intersections: non-stop routes!
- > Conclusions

#### Who are we?

Cortney Mild **Gwen Jewiss** Rashed Islam Jeb Boyt **Shawn Cooper** Richard ter Avest Victor Vargas Anthony Alvarado Matt Hollon Shannon Halley Zach Vanderkooy Tom Godefrooij **Lewis Leff** Neil Kopper Jana McCann Tom Wald Nathan Wilkes Fili Bonilla Jack Sanford **KC** Willis Jeb Boyt





















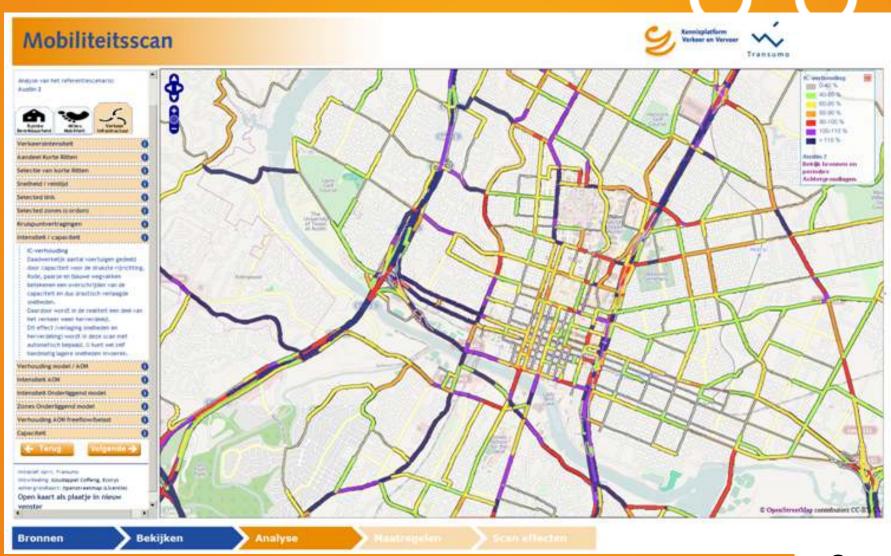
## Qualities city center

- Diversity and concentration
- > Lake and Creeks
- Congress Avenue: central axis to Capital building
- > Amtrak and Austin Metro- station/lines
- University with 50.000 students!

## Problems in city center

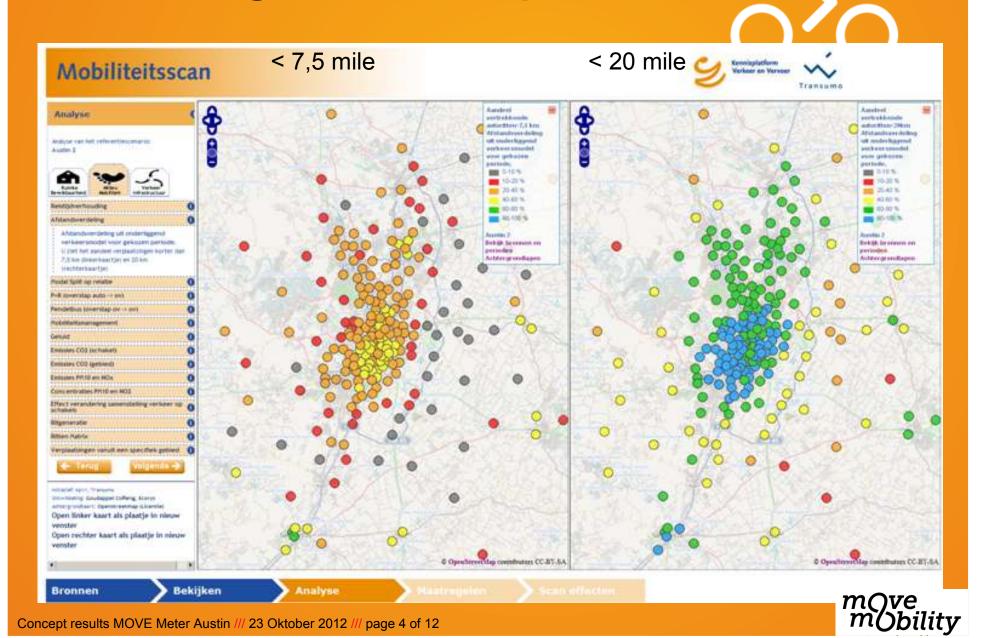
- Unsafe, wide roads (mix cars and bikes)
- Land Uses are incomplete (shops, playgrounds)
- Long commuter trips from suburbs
- > Highways disrupt connections/coherence of cyclenetwork
- > No lighting on trails along creeks
- > No end-of-trip facilities in offices (e.g., showers)

#### Volume/capacity ratios

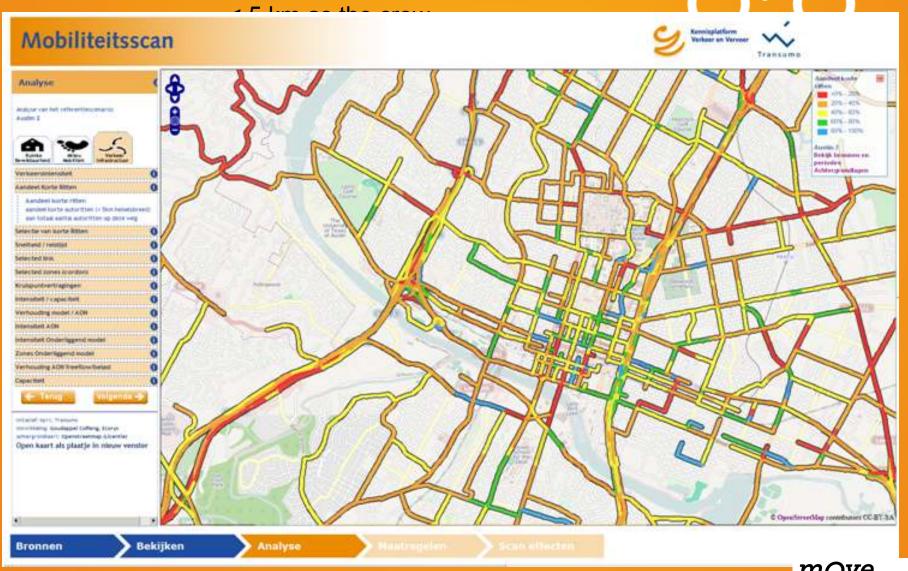




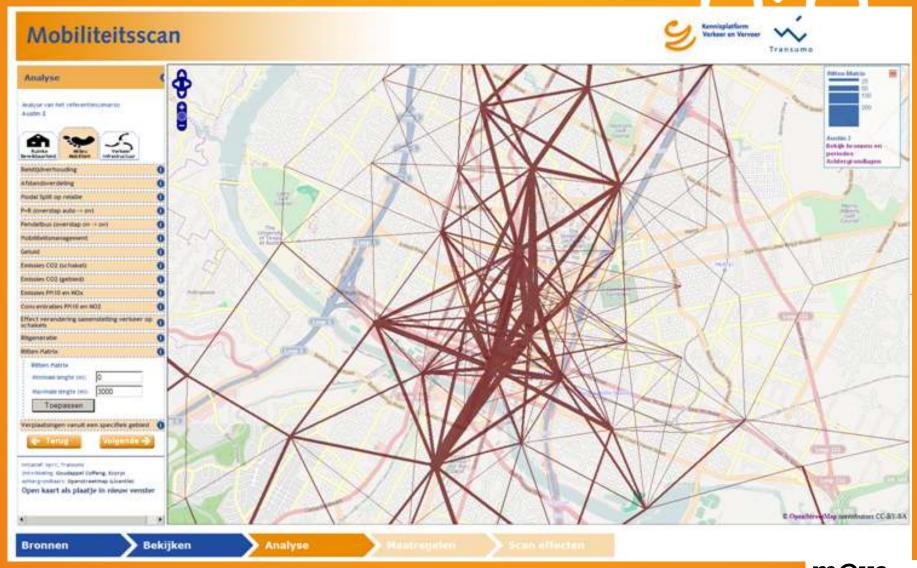
#### Percentage of short trips



#### Short trips in the city center



### Spider short car-trips (0-3 mile)



#### Spider car-trips 3-7 mile



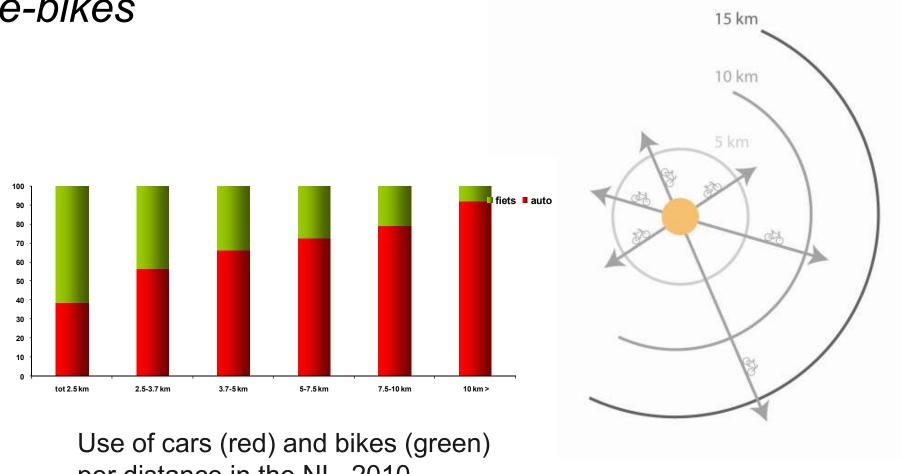


#### V/C ratio with 15% trips < 7 miles on bike





### Catchment area of cycle highways and e-bikes







# 2nd Street of Today

#### Impressions of Cycling in Austin



## Attractive cycling environment







## Great bridges...



# and bridges that could be better

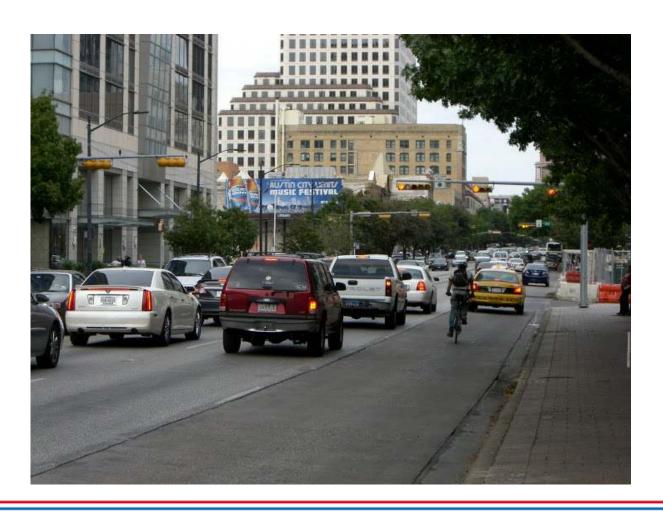


## Existing on-street facilities





#### High auto traffic volumes, integrated auto/bike traffic



## Many stops



#### And then we buckled down to work!





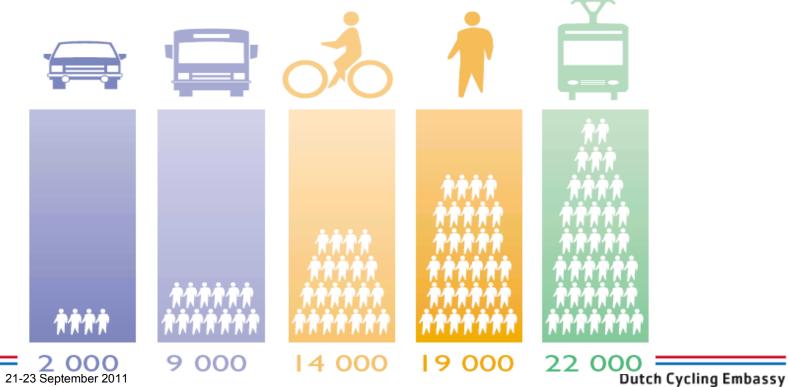


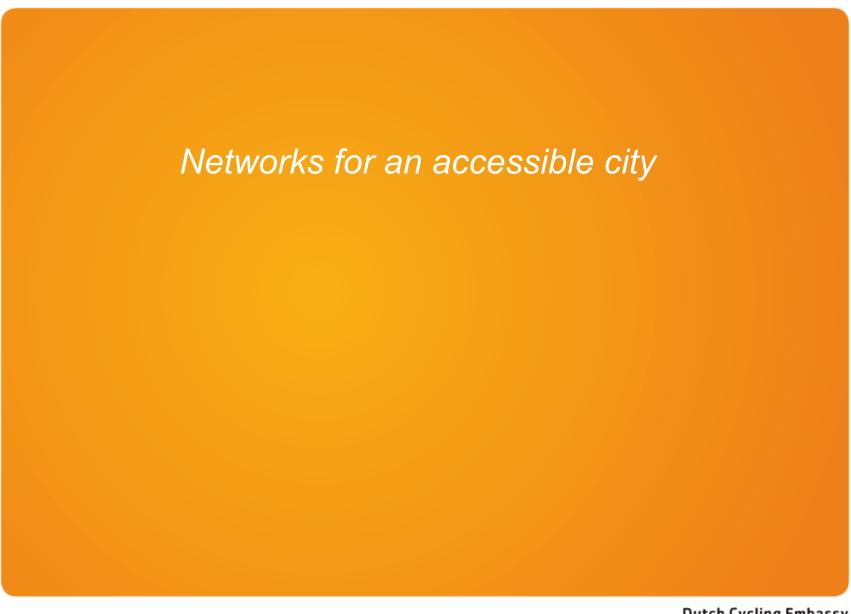


## More people in the streets

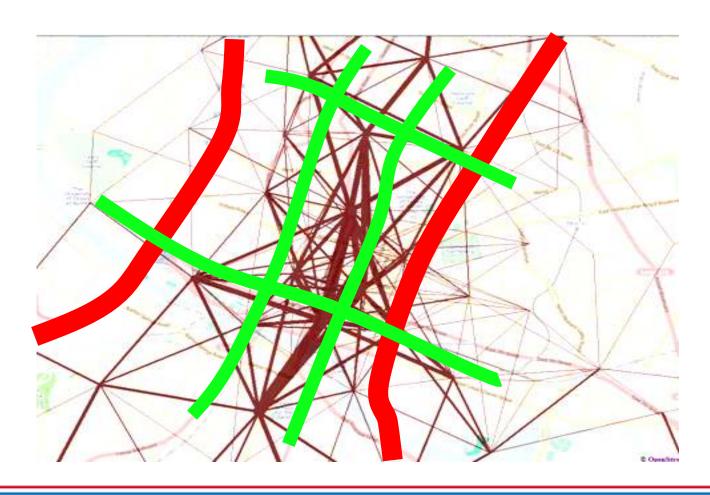
Road capacity

(people per hour on 3.5 m width in the city)

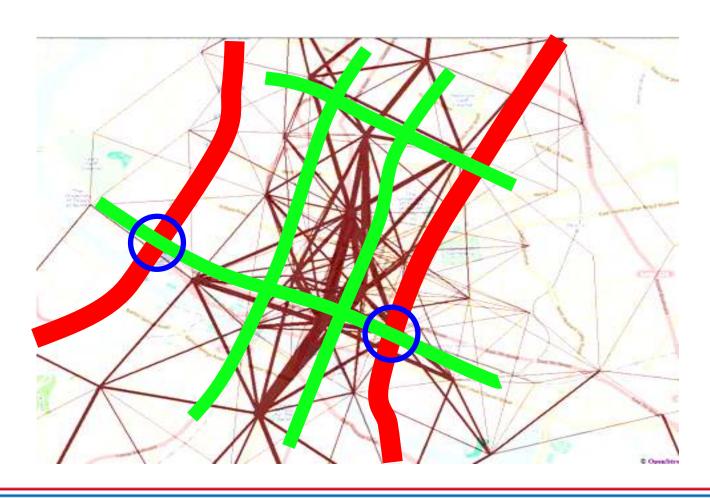




## Network Concept: Ladder System



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## Policy: Network Guidelines

- 1. Coherence
- 2. Directness
- 3. Attractiveness
- 4. Safety
- 5. Convenience

## Policy: Network Density

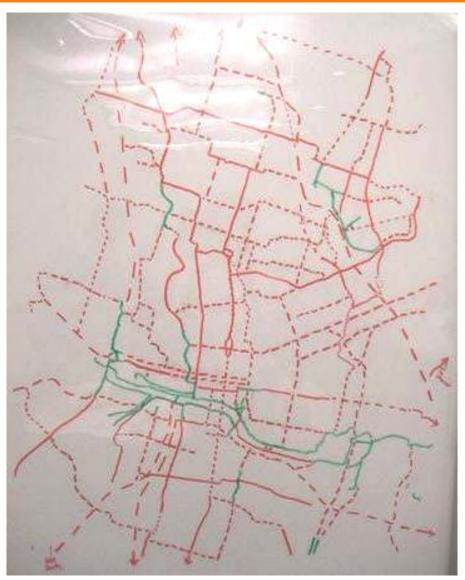
**Dutch Urban Networks:** 

Every 1/3 mile

Austin Conceptual Network: 1/2 - 3/4 mile

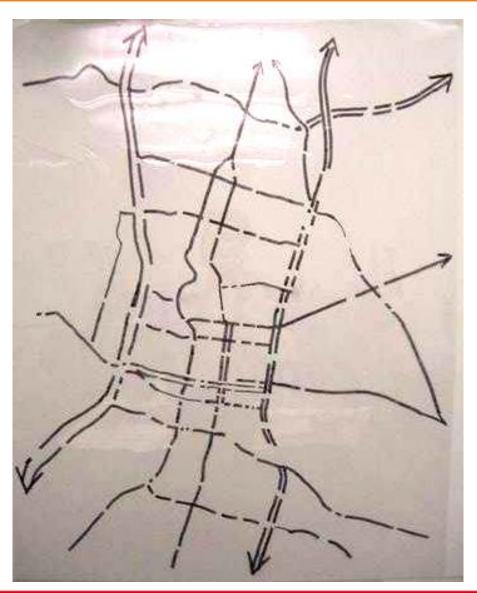
## Bike network





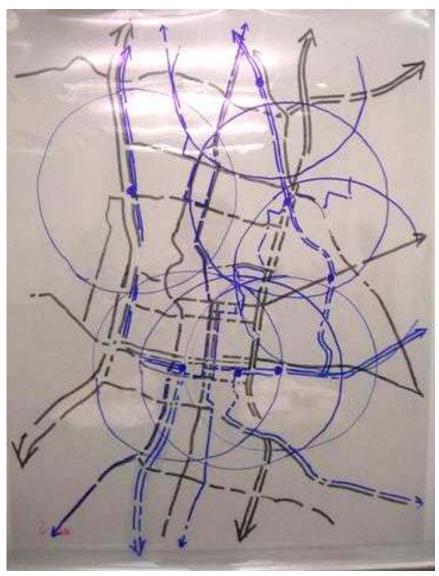
## Car network



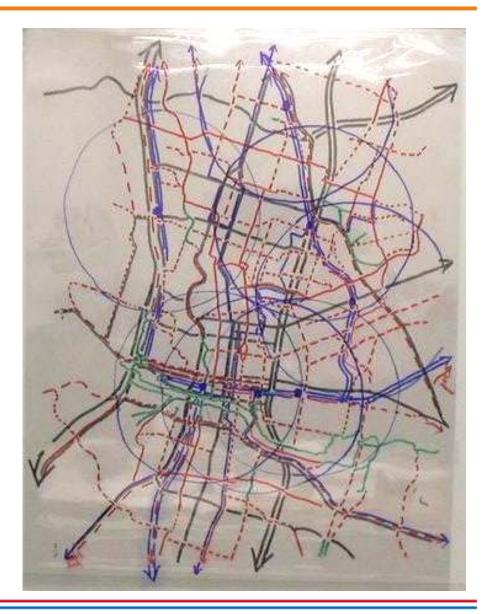


## Car + transit network





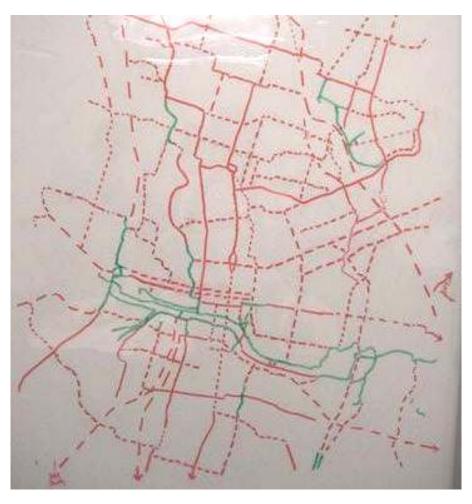
# Car + Transit + Bike Network



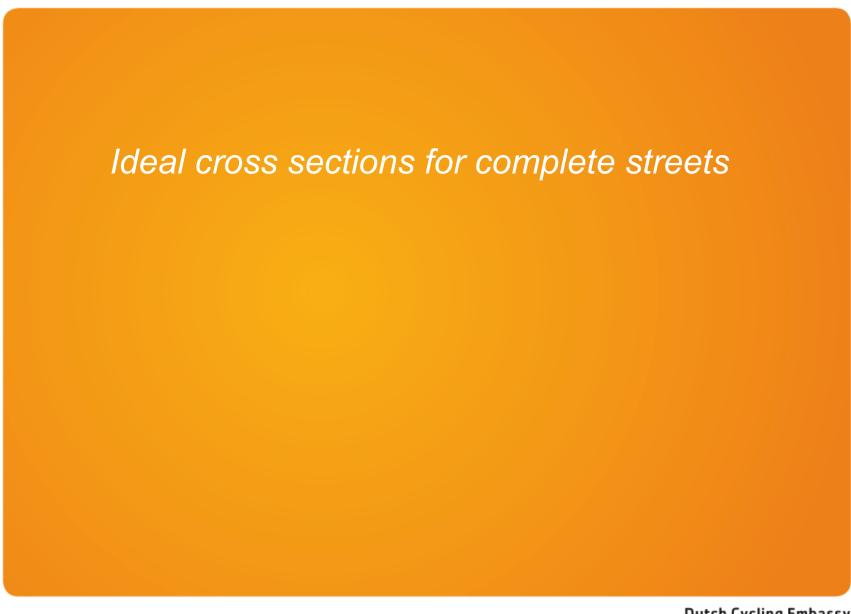
### Butler Trail as Backbone











## Types of Bike Facilities

	Speed	Volume	Destinations	Intersection Density
Separated Facility	High >30mph	High	Long Connections	Low
Colored Bicycle Lane	Medium 20-30mph	Medium	Local Access	Medium or High
No Specific Bicycle Facility	Low <20mph	Low	Local Access	Medium or High

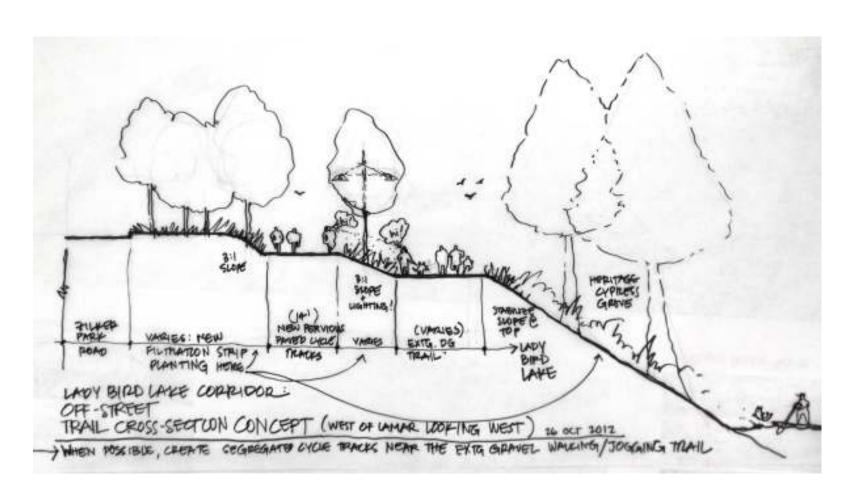
#### One-Way vs Two-Way Bicycle Facilities

	One-Way Travel →	Two-Way Travel ↔
Destinations (e.g. shops, cafes, etc.)		
High Traffic Volume (e.g. 4 or more car lanes)		
High Speed/High Volume with Short Detour (convenient parallel route)		

### Lady Bird Lake Corridor: Existing



#### Lady Bird Lake Corridor: Parallel off-street Trail



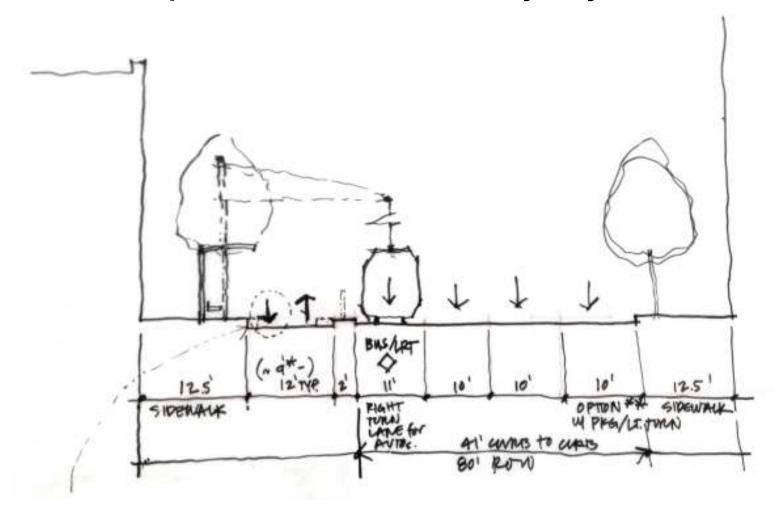
### Lady Bird Lake Corridor: Parallel off-street Trail



### Guadalupe & Lavaca: Existing



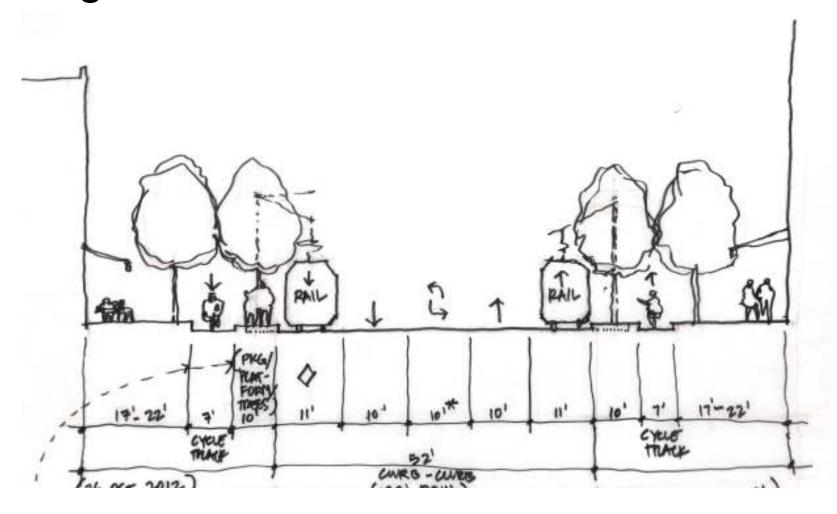
### Guadalupe & Lavaca: 2-way Cycle Track



### Congress Avenue: Existing

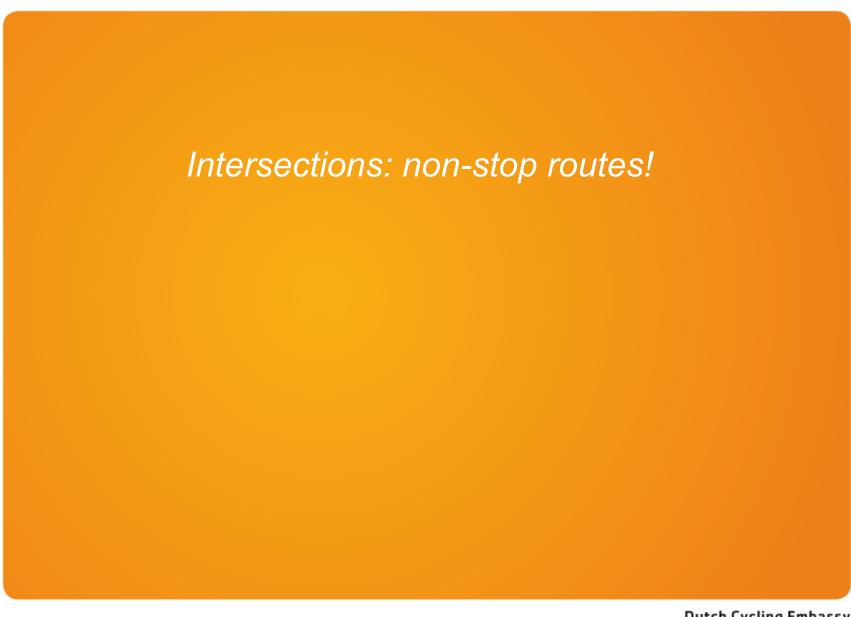


### Congress Avenue: The Main Street of TX

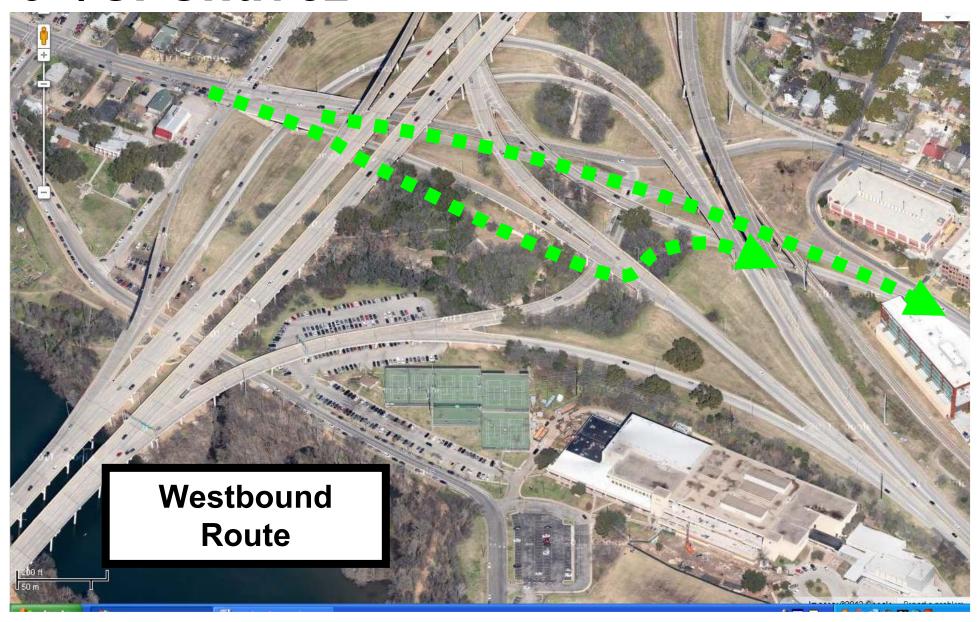


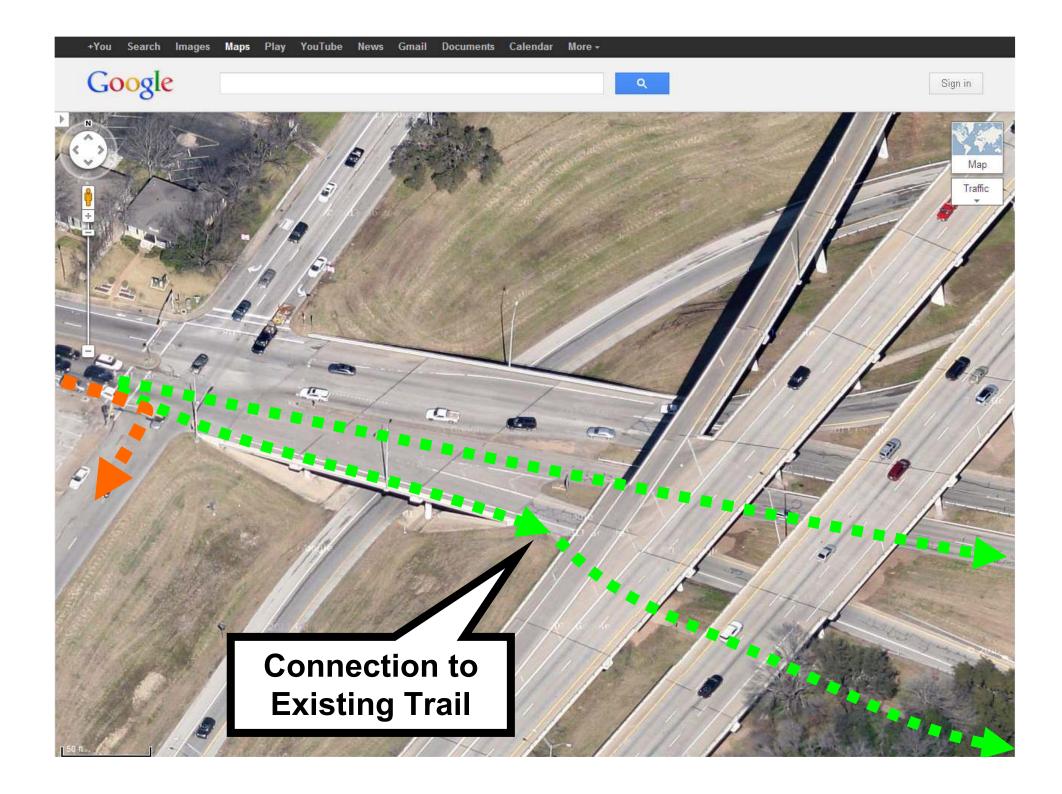
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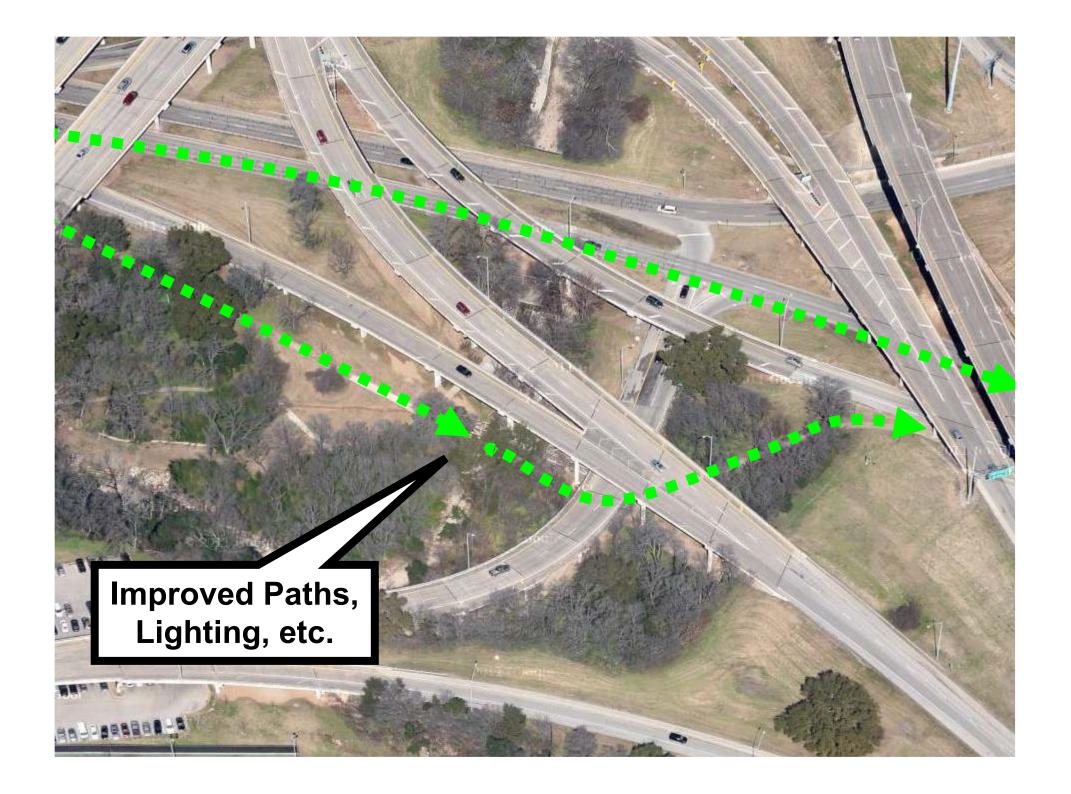




## N. Mopac at Lake Austin Blvd/5<sup>th</sup>/C. Chavez



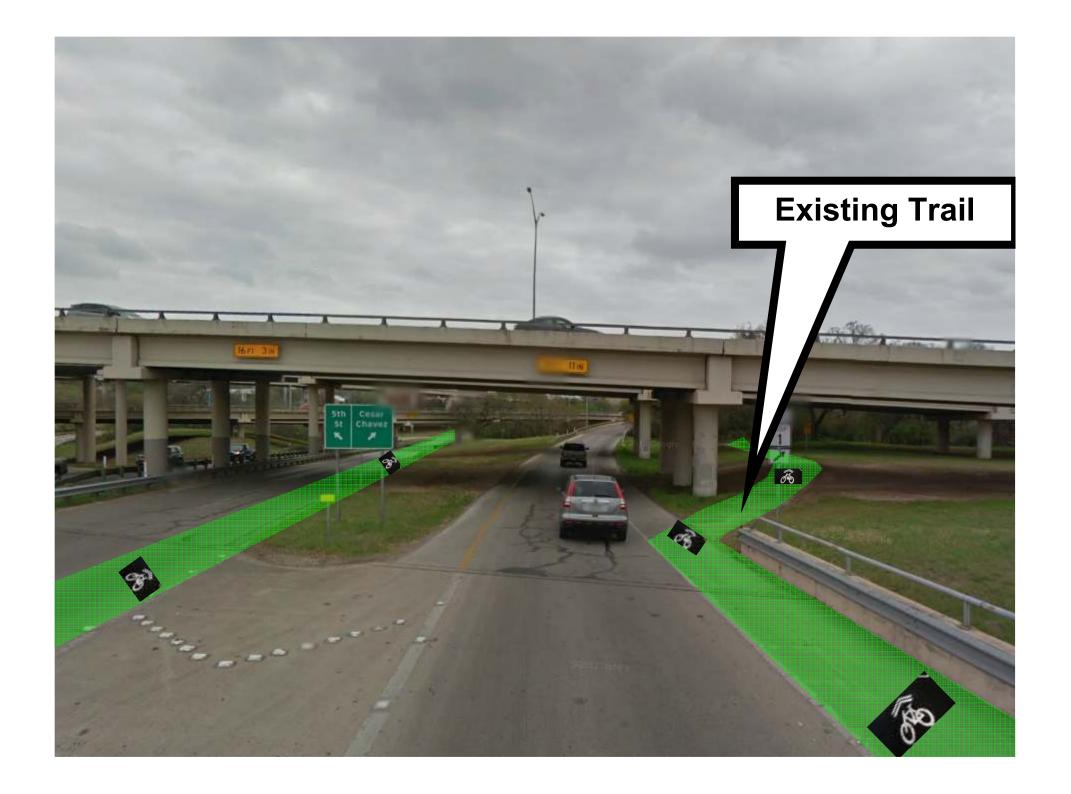


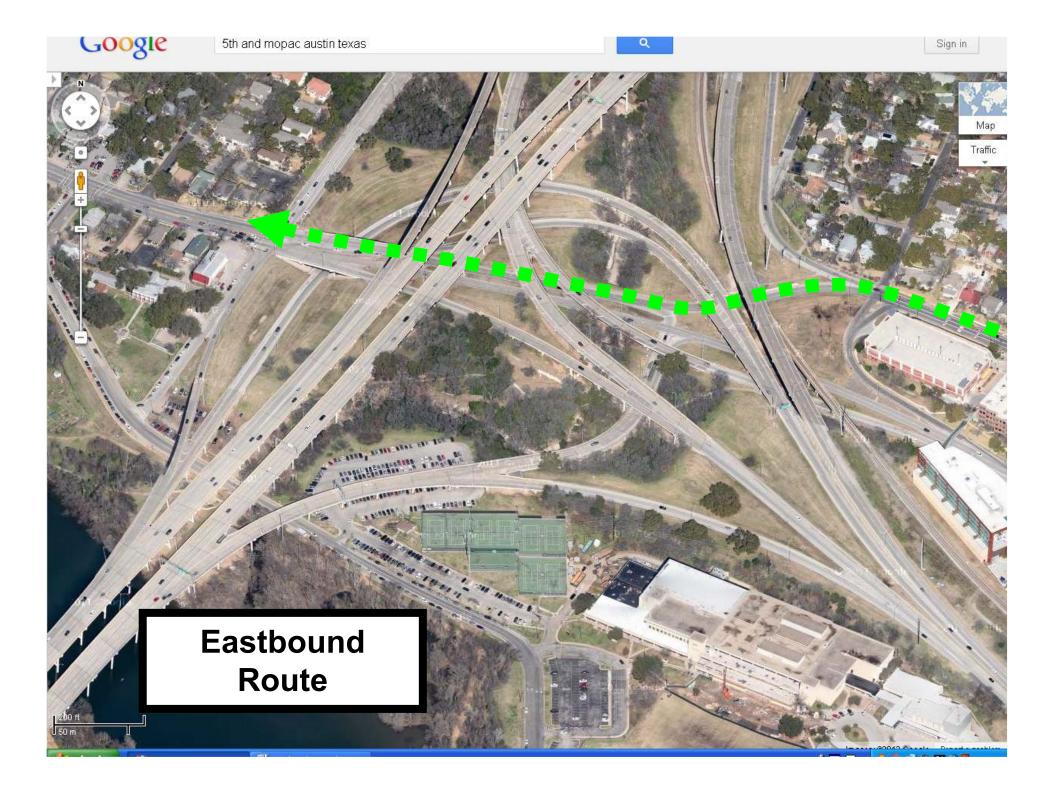


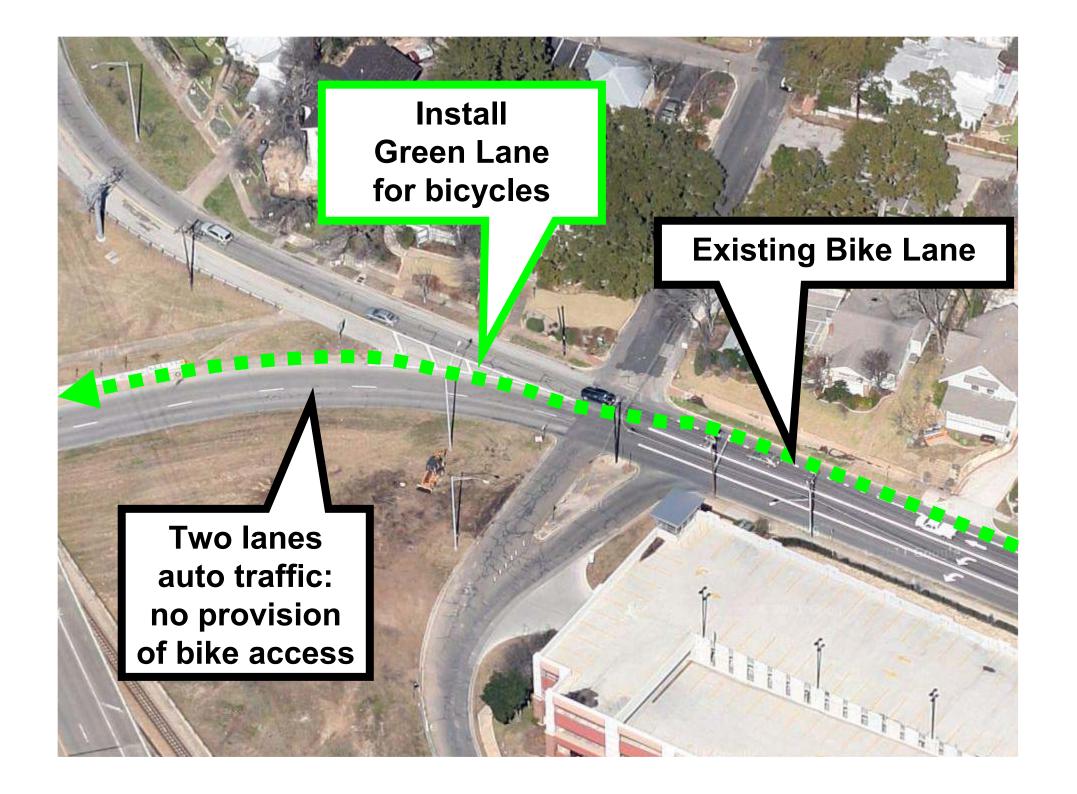


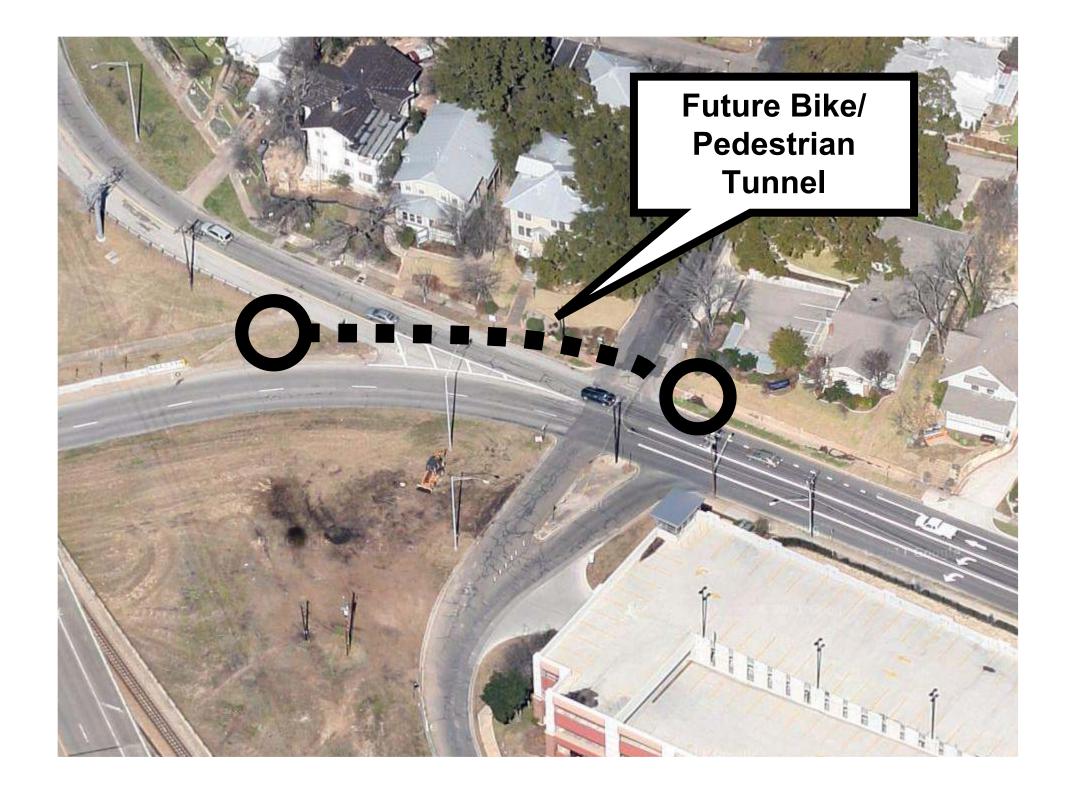




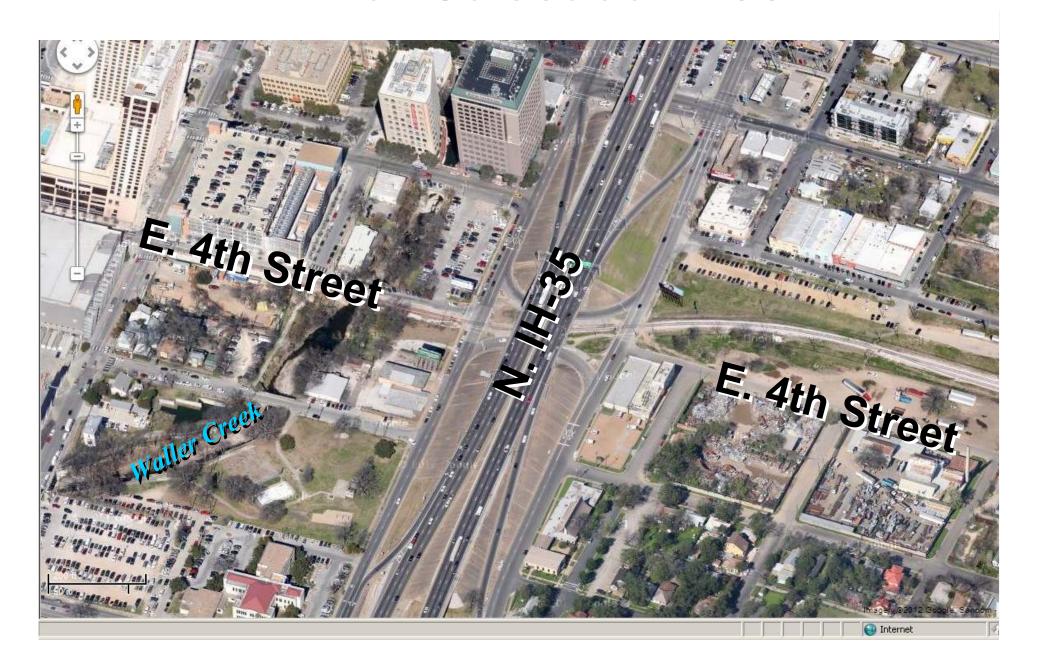


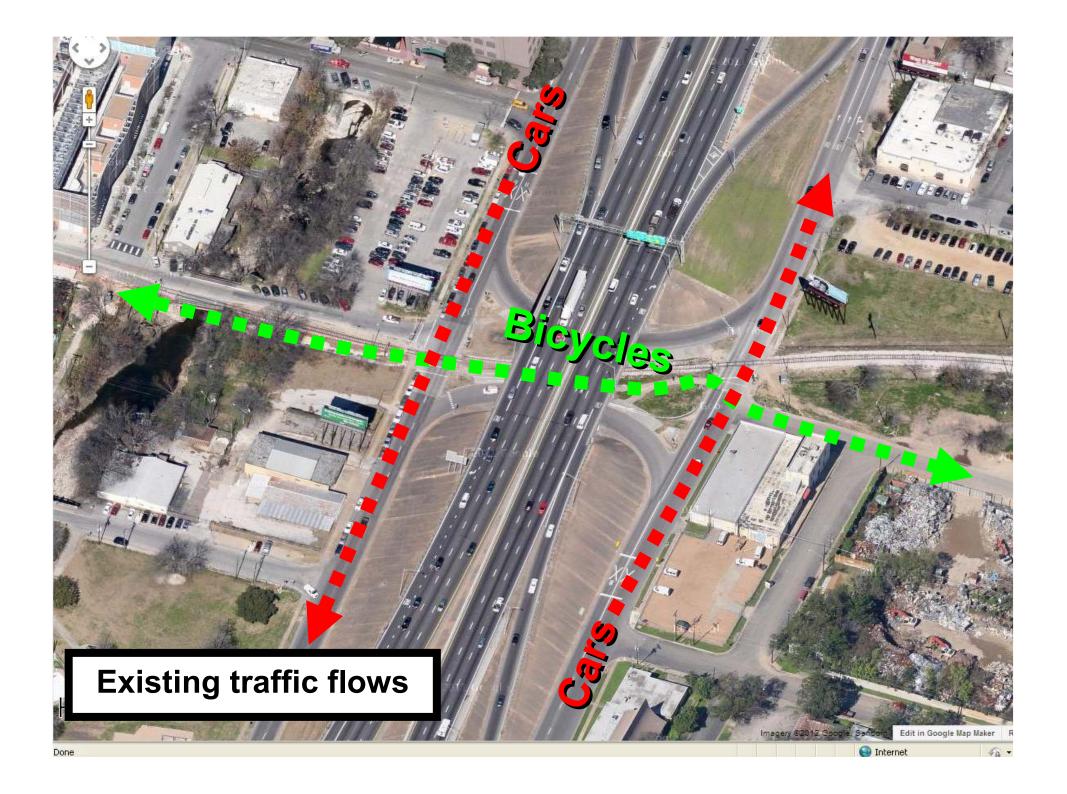




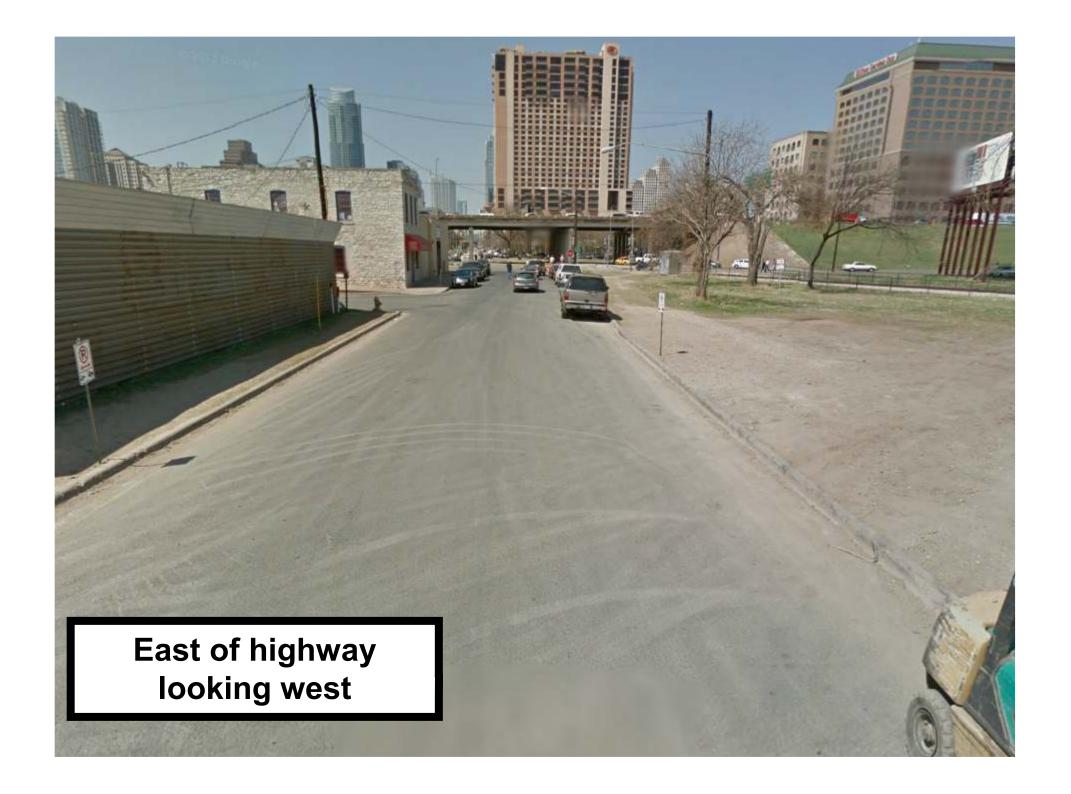


#### E. 4th Street at IH-35

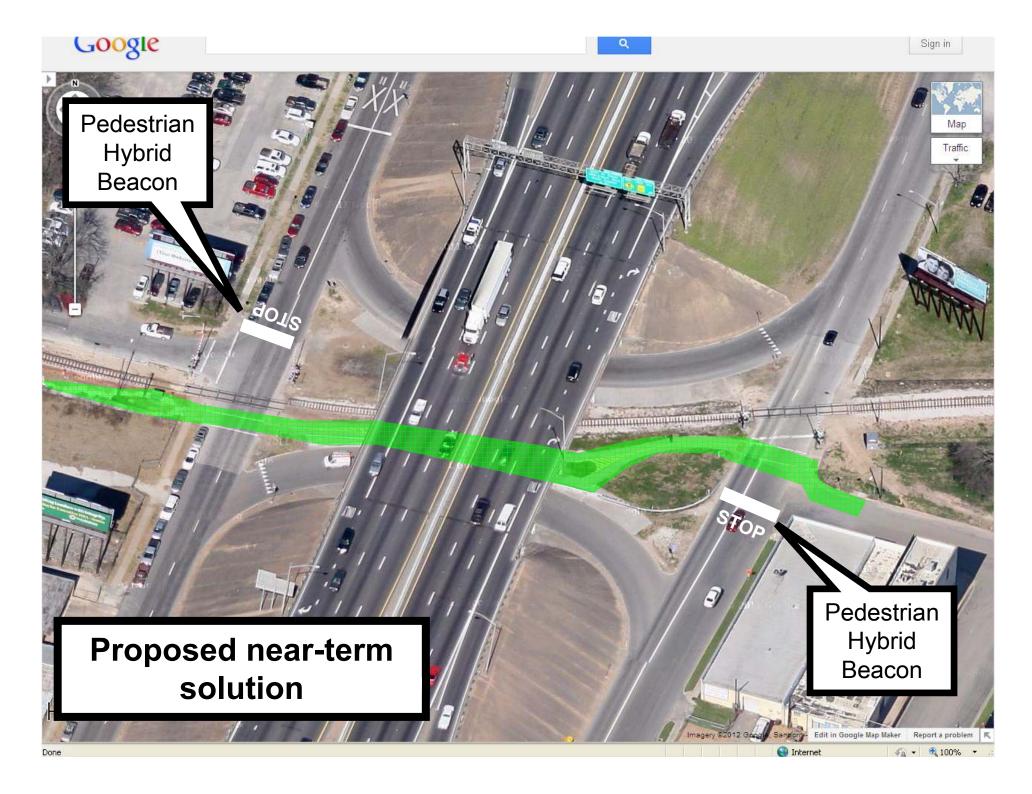




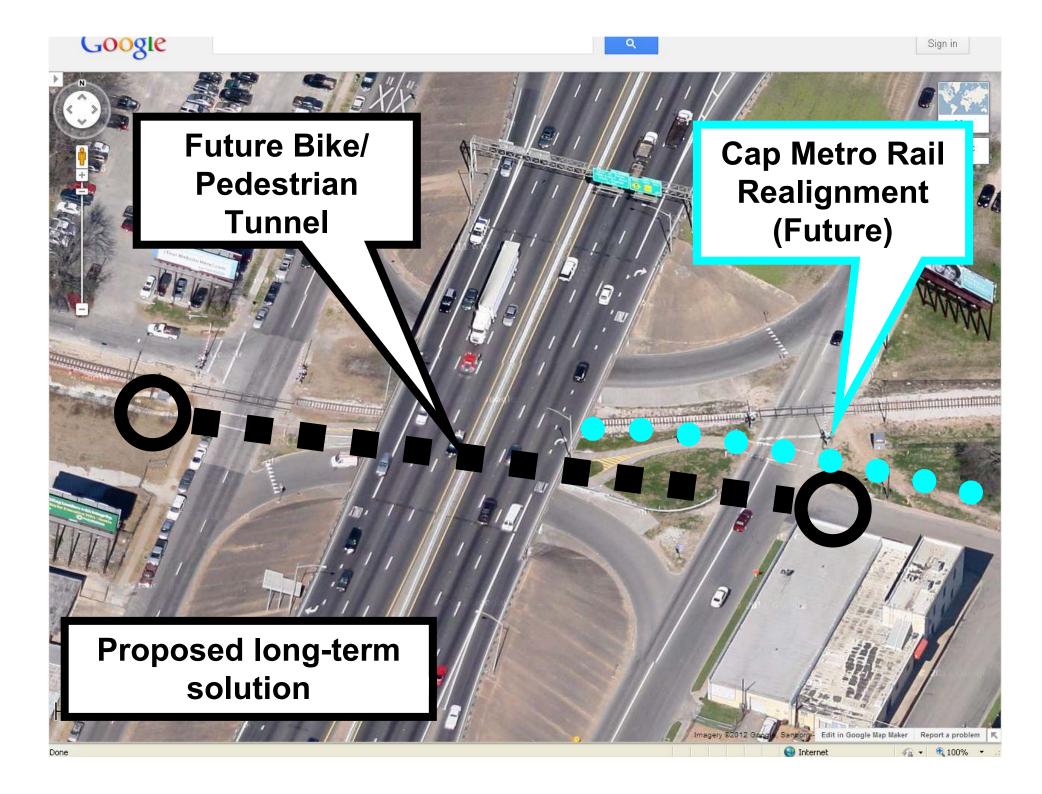


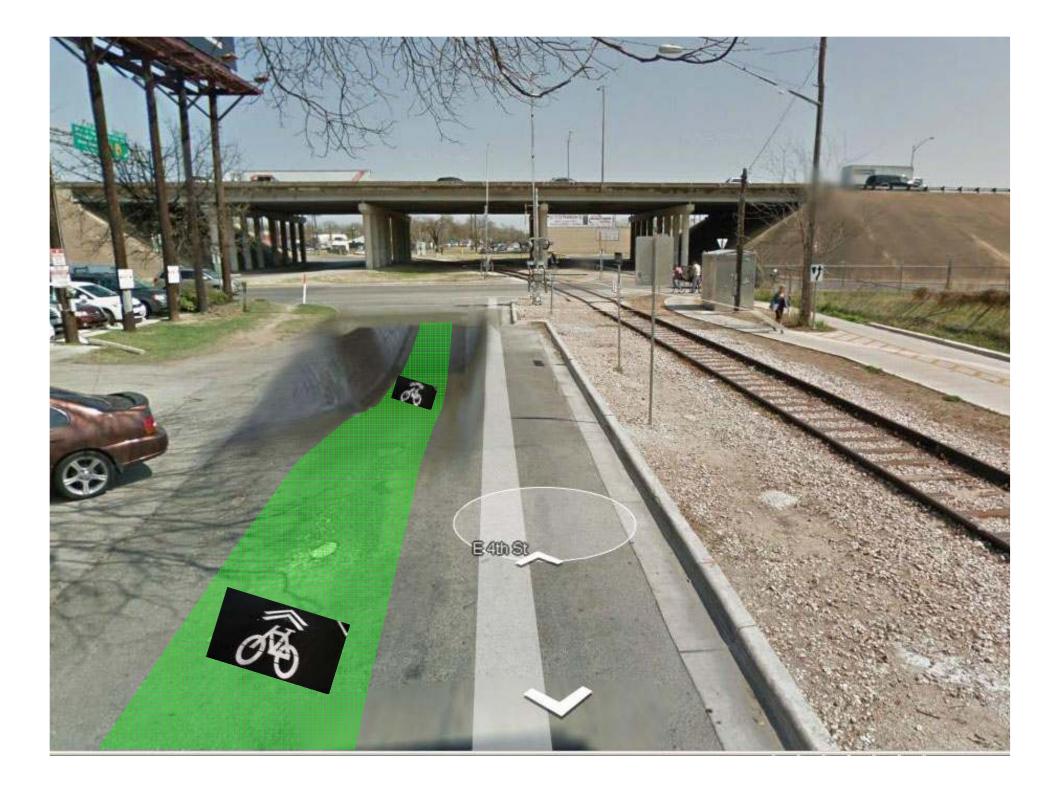










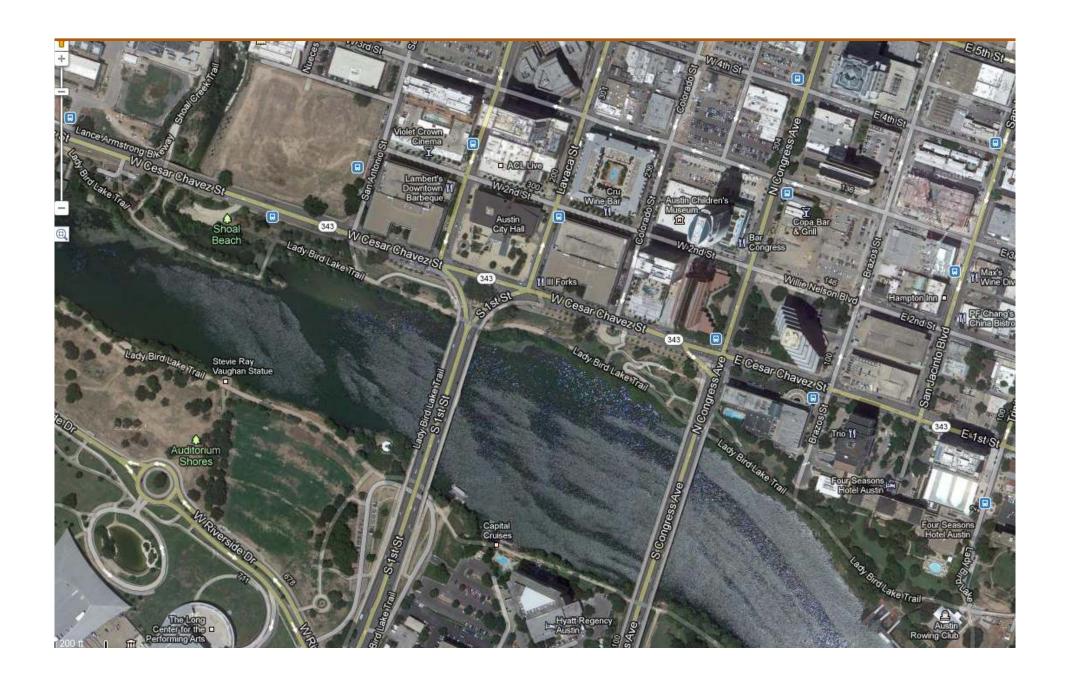


## Alternative solution: bike-bridge, parallel to (double Metro-rails) and underpass for cars

(example Amersfoort, the Netherlands)



### First Street Bridge at City Hall



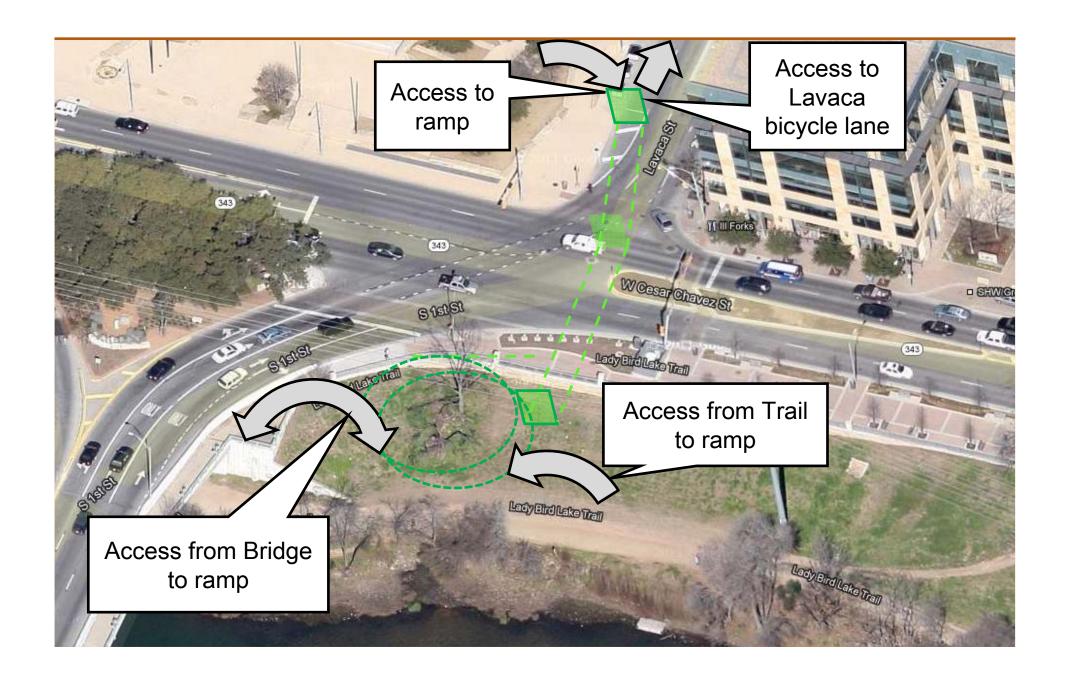
## Close-up of existing conditions - First Street Bridge at City Hall



Interim Bicycle Lane - First Street Bridge at City Hall



### **New Tunnel & Ramp**

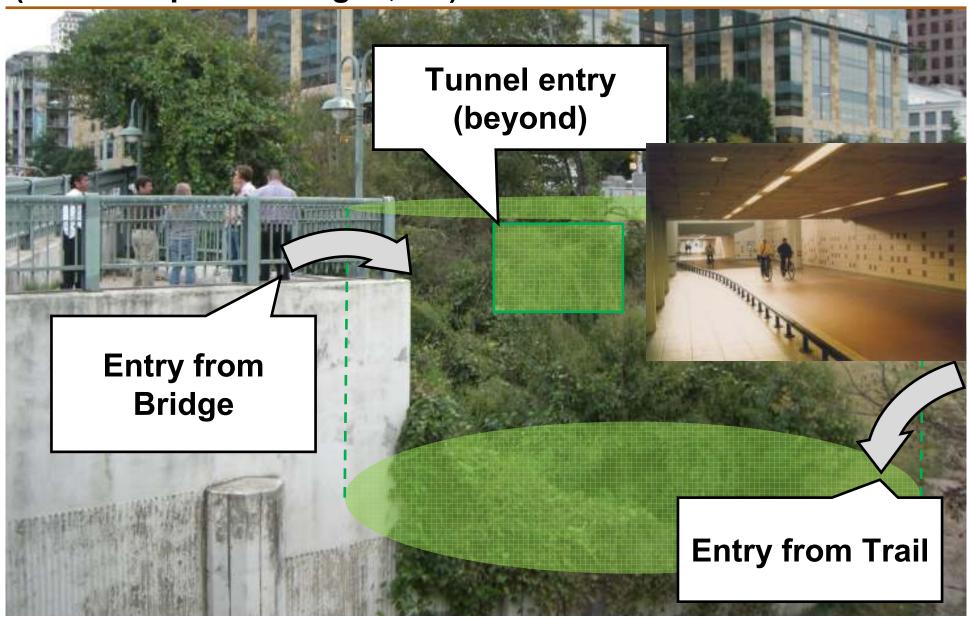


### Pfluger Bridge Ramp

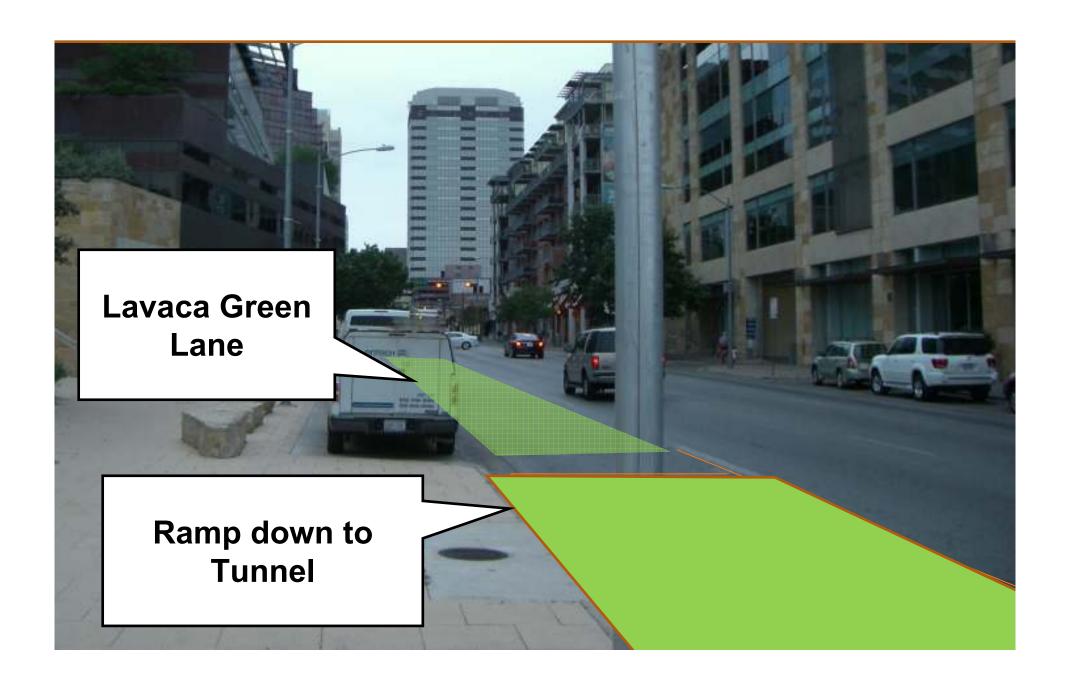


### **New Tunnel & Ramp**

(incl example The Hague, NL)



### **New Ramp to Lavaca**



#### Conclusions

- > Austin is a starting bike-city
- > Austin has a ladder-system for cars and a cross for bicycles
- A real heart in downtown is good for everybody (residents, offices, visitors, shopkeepers, restaurants)
- > Short car trips -> bike trips; better for all traffic
- > We designed some solutions for short and long term.

# Austin: Golden city in the future?







